1-2003

MICB 406.01: Topics for Clinical Diagnosis

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MICROBIOLOGY 406-CLINICAL DIAGNOSIS
COURSE OBJECTIVES

At the completion of Micb 406, the student will be able to:

1. Understand the structure of a clinical laboratory
2. Describe the reasons for the explosion in health care usage.
3. Describe the importance and operation of a laboratory information system (LIS) and the interface in the hospital information system (HIS)
4. Explain how the clinical laboratory aids in the diagnosis of disease
5. Understand the importance and specifics of a good patient medical history
6. Describe in a general sense the use of clinical immunology in disease diagnosis
7. Explain the difference between quality control and quality assurance and the mechanics of both programs.
8. Outline the steps in setting up a new analyzer/test in the clinical lab
9. Describe the components of a urinalysis dipstick test and the relevance of abnormal results
10. Describe the microscopic components of the urinalysis and what the presence of each can mean in kidney and metabolic disease
11. Outline the components of a general chemistry health profile and list what abnormal values might indicate.
12. Understand the importance of serum electrophoresis and immunofixation in detection of serum and urine proteins, as well as disease states associated with abnormal amounts of each.
13. Describe the significance of the presence or absence of cardiac and liver enzymes in plasma/serum samples and the disease states associated with each.
14. List the different types of viral hepatitis and serum markers that can aid in the diagnosis of this disease.
15. Describe the different forms of thyroid disease including metabolic and tumor induced
16. List the cancer markers available in the lab for diagnosis of various types of malignancies.
17. Describe the methods used to properly obtain a bacterial, viral, and fungal culture specimen.
18. Discuss the methods available to obtain a antimicrobial sensitivity pattern.
19. Describe the difference between a minimal inhibitory concentration and a minimal bacteriocidal concentration test for treating bacterial infections
20. Outline the important factors in a functional hospital infection control program.

MICROBIOLOGY 406 – CLINICAL DIAGNOSIS
LECTURE SCHEDULE- SPRING 2003

JANUARY	27	Introduction to the Clinical Laboratory
	29	continue
FEBRUARY	3	Use of the clinical laboratory as an aid to making a diagnosis
	5	Quality control vs quality assurance
	10	Reference values (normal ranges)
	12	Immunology for the Clinical Laboratory
	17	HOLIDAY
	19	Urinalysis
	24	Urinalysis
	26	Urinalysis
MARCH	3	Urinalysis
	5	FIRST EXAMINATION
	10	Clinical Chemistry-Procedures
	12	Clinical Chemistry-Testing
	17	Special Chemistry
	19	Special Chemistry
	24-28	SPRING BREAK
	31	Special Chemistry
APRIL	2	Special Chemistry
	7	Special Chemistry
	9	Toxicology
	14	Toxicology
	16	SECOND EXAMINATION
	21	Clincial microbiology
	23	Clinical microbiology
	28	Clinical microbiology
	30	Clinical virology
MAY	5	Clinical Virology
	7	Clinical virology
	12-16	FINALS WEEK
		FINAL EXAM 2/3 CURRENT MATERIAL---1/3 COMPREHENSIVE

EXAMS: First exam (100 pts) Second (100 pts) Final (150 pts)
QUIZZES: 2 UNANNOUNCED >>>> 25 pts ea

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TEXT: On reserve in the library (for reference)
Clinical Diagnosis and Management by Laboratory Methods
John B Henry, MD. 1996 19th ed
ISBN: 0-7216-6030-4

UNIVERSITY POLICY: *drops, adds, changes of grade option, or change to audit status.*

University policies on drops, adds, changes of grade option, or change to audit status will be strictly enforced in this course. The policies are described on page 16 of the 2001-2002 catalog. Students should specifically note that after the 30th day of the semester, such changes are NOT automatically approved. They may be requested by petition, but the petition MUST be accompanied by documentation of extenuating circumstances. Requests to drop a course or change the grade basis to benefit a student's grade point average will not be approved.